

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for detecting a tear-off strip (11) or a tear-off thread on a material web (12) ~~or film web with the aid of sensors, characterized by the following features: sensors comprising an ultrasonic transmitter and an ultrasonic receiver, said method comprising the steps of:~~

a) ~~the sensors are positioning the ultrasonic transmitters (18), on the one hand, transmitter (18) and the ultrasonic receivers (19), on the other hand, which are positioned receiver (19) on different opposite sides sides, respectively, of the material web (12),~~

b) ~~positioning the ultrasonic transmitter (18) and the ultrasonic receiver (19) are positioned such that the material web (12) conveyed between the ultrasonic transmitter (18) and the ultrasonic receiver (19) is registered by ultrasonic waves substantially exclusively in the a region of the tear-off strip (11) or tear-off thread,~~

c) ~~constructing the ultrasonic transmitter (18) is constructed in such a way that a lobe or response curve generated by the latter ultrasonic transmitter corresponds approximately to the a width of the tear-off strip (11) or thread, and~~

d) ~~connecting the ultrasonic receiver (19) is connected to an evaluation unit which reacts to changes in the intensity of the waves picked up the ultrasonic receiver.~~

2. (currently amended): An apparatus for implementing the method as claimed in claim 1, a tear-off strip (11) or tear-off thread being laid continuously on a continuously conveyed material web (12) and joined to the latter and it then being possible for material web, so that blanks ~~for wrapping to~~ can be severed from the web, characterized in that, said apparatus comprising:

following a joining station of the material web (12) and the tear-off strip (11) or thread, a testing ~~device~~ device, for detecting the tear-off strip ~~(11) is~~ (11) or thread, positioned in a fixed location and the film location; and

means for moving the web can be moved past this said testing apparatus, device,
the testing ~~apparatus~~ device comprising at least one ultrasonic transmitter (18) and at least one ultrasonic receiver (19),

said ultrasonic transmitter (18) and said ultrasonic receiver (19) being positioned on both opposite sides of the material web (12) in such a way that ~~sound~~ ultrasonic waves originating from the ultrasonic transmitter (18) strike the material web (12) substantially exclusively in the a region of the tear-off strip (11) or thread, so that ultrasonic waves passing through the material web are and, if appropriate, can be picked up by the opposite ultrasonic receiver (19).

3. (currently amended): The apparatus as claimed in claim 2, characterized in that said ultrasonic transmitter (18) and said ultrasonic receiver (19) are positioned in ~~the a~~ a region of an upright section (20) of the material web (12), ~~in particular immediately above an upright web conveyor, namely a suction belt (22) of a blank-cutting unit (16), preferably following a deflection roll (21).~~ (16).

4. (currently amended): The apparatus as claimed in claim 2, characterized in that said ultrasonic transmitter (18) and said ultrasonic receiver (19) are oriented in an oblique position with respect to ~~the~~ a plane of the material web (12).

5. (currently amended): The apparatus as claimed in claim 2, characterized in that the ultrasonic transmitter (18) is arranged underneath the ultrasonic receiver ~~(19), preferably on the side of the material web (12) having the tear-off strip (11). (19).~~

6. (currently amended): The apparatus as claimed in claim 2, characterized in that the ultrasonic transmitter (18) is provided with a limiting means on ~~the~~ an outlet side thereof in order to influence the characteristics or width of the response curve, ~~in particular with a (slot-like) said~~ limiting means comprising a slot-like aperture stop (24).

7. (currently amended): The apparatus as claimed in claim 6, characterized in that the aperture stop (24) bounds a gap (25) extending diametrically over the ultrasonic transmitter (18) and running in the direction of the tear-off strip (11) or thread.

8. (new): A method for manufacturing blanks with a tear-off strip (11) or a tear-off thread for the purpose of wrapping packs (10), with the tear-off strip (11) or a tear-off thread being laid continuously on a continuously conveyed material web (12) and joined to the material web, and with blanks being then severed from the material web (12), comprising the following steps:

after the tear-off strip (11) has been laid on the material web (12), moving the material web past sensors which detect the tear-off strip (11) or the tear-off thread, the sensors being an

ultrasonic transmitter (18) and an ultrasonic receiver (19) which are positioned on different sides of the material web (12),

positioning the ultrasonic transmitter (18) and the ultrasonic receiver (19) such that the material web (12) conveyed between ultrasonic transmitter (18) and ultrasonic receiver (19) is registered by ultrasonic waves substantially exclusively in a region of the tear-off strip (11) or tear-off thread,

constructing the ultrasonic transmitter (18) in such a way that a lobe or response curve generated by the ultrasonic transmitter corresponds approximately to a width of the tear-off strip (11), and

connecting the ultrasonic receiver (19) to an evaluation unit which reacts to changes in intensity of the ultrasonic waves picked up by the ultrasonic receiver.

9. (new): An apparatus for manufacturing blanks with a tear-off strip (11) or a tear-off thread for the wrapping of packs, with a continuous tear-off strip (11) or tear-off thread being laid on a continuously conveyed material web (12) in a region of a joining station and joined to the material web, so that blanks can be severed from the material web,

said apparatus comprising:

a) following the joining station for applying the continuous tear-off strip (11) or thread to the material web (12), a testing device, for detecting the tear-off strip (11) or thread, positioned in a fixed location, and

b) means for moving the material web (12) past the testing device,

c) wherein the testing device comprises at least one ultrasonic transmitter (18) and at least one ultrasonic receiver (19) which are positioned on opposite sides of the material web (12), and

d) wherein said ultrasonic transmitter (18) and said ultrasonic receiver (19) are positioned in a region of the tear-off strip (11) or thread in such a way that ultrasonic waves, originating from the ultrasonic transmitter (18), strike the material web (12) substantially exclusively in a region of the tear-off strip (11) or thread, so that ultrasonic waves passing through the material web are picked up by the opposite ultrasonic receiver (19).

10. (new): The apparatus as claimed in claim 9, characterized in that said ultrasonic transmitter (18) and said ultrasonic receiver (19) are positioned in a region of an upright section (20) of the material web (12), immediately above an upright suction belt (22) of a blank-cutting unit (16).

11. (new): The apparatus as claimed in claim 9, characterized in that said ultrasonic transmitter (18) and said ultrasonic receiver (19) are oriented in an oblique position with respect to a plane of the material web (12).

12. (new): The apparatus as claimed in claim 9, characterized in that the ultrasonic transmitter (18) is arranged underneath the ultrasonic receiver (19).

13. (new) The apparatus as claimed in claim 9, characterized in that the ultrasonic transmitter (18) is provided with a limiting means on an outlet side thereof in order to influence the characteristics or width of the response curve, said limiting means comprising a slot-like aperture stop (24).

14. (new): The apparatus as claimed in claim 13, characterized in that the aperture stop (24) bounds a gap (25) extending diametrically over the ultrasonic transmitter (18) and running in the direction of the tear-off strip (11) or thread.